

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date
14 July 2005 (14.07.2005)

PCT

(10) International Publication Number
WO 2005/064942 A1

(51) International Patent Classification⁷: **H04N 7/173**

(21) International Application Number:
PCT/KR2004/002336

(22) International Filing Date:
14 September 2004 (14.09.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
10-2003-0098407
27 December 2003 (27.12.2003) KR
10-2004-0037919 27 May 2004 (27.05.2004) KR

(71) Applicant (for all designated States except US): **ELECTRONICS AND TELECOMMUNICATIONS RESEARCH INSTITUTE [KR/KR]; 161, Gajeong-dong, Yuseong-gu, Daejon 305-350 (KR).**

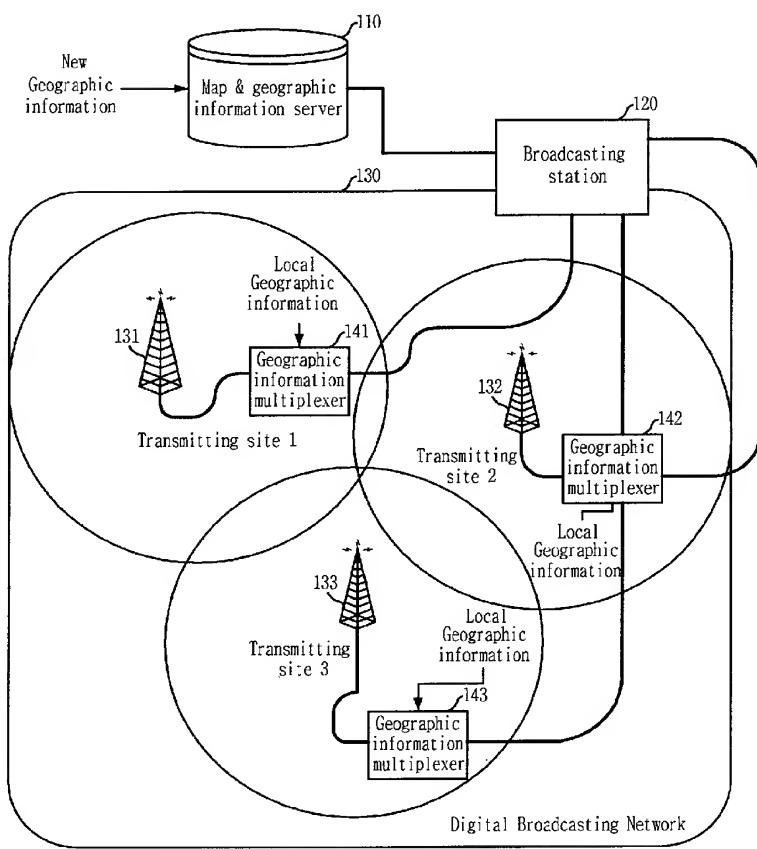
(72) Inventors; and

(75) Inventors/Applicants (for US only): **CHO, Sammo [KR/KR]; #106-1105 Hanmaeul Apt., Songgang-dong, Yuseong-gu, Daejon 305-756 (KR). KIM, Geon [KR/KR]; #101-1002 Hansol Apt., Songgang-dong, Yuseong-gu, Daejon 305-758 (KR). LEE, Hyun [KR/KR]; #2-203 Garam Villa, Sinseong-dong, Yuseong-gu, Daejon 305-804 (KR). LEE, Gwang-Soon [KR/KR]; #407-302 Yeolmae maeul Apt., Jijok-dong Yuseong-gu, Daejon 305-770 (KR). HAHM, Young-Kwon [KR/KR]; #133-101 Hanbit Apt., Eoeun-dong, Yuseong-gu, Daejon 305-755 (KR). AHN, Chung-hyun [KR/KR]; #101-705 Hyundai Apt., Doryong-dong, Yuseong-gu, Daejon 305-340 (KR). LEE, Soo-In [KR/KR]; #106-606 Clover Apt., Dunsan 1-dong, Seo-gu, Daejon 302-772 (KR).**

(74) Agent: **SHINSUNG PATENT FIRM; 2F, Line Bldg., 823-30, Yeoksam-dong, Gangnam-gu, Seoul 135-080 (KR).**

[Continued on next page]

(54) Title: **GEOGRAPHIC INFORMATION TRANSCEIVING SYSTEM AND METHOD THEREOF**



(57) **Abstract:** Provided is a geographic information transceiving system and method using a digital broadcasting network. The system and method segments new geographic and map data of a region, on which a geographic information service is provided, makes data segment files of different sizes, and multiplexes and transmits the files. A geographic information transmitting system includes: a geographic information collector for receiving real-time geographic information and real-time traffic information; a geographic information processor for extracting/processing local geographic information and local traffic information from the geographic information collecting means and outputting whole area information, geographic information and traffic information for a plurality of resolution levels; a digital broadcasting unit for converting and transmitting the geographic information/traffic information data in conformity to digital broadcast signals; a geographic information multiplexer for multiplexing the geographic information/traffic information data; and a transmitter for transmitting the multiplexed geographic information/traffic information data to a corresponding region.



(81) **Designated States (unless otherwise indicated, for every kind of national protection available):** AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) **Designated States (unless otherwise indicated, for every kind of regional protection available):** ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,

ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.